

Claims

1.-11. (cancelled)

12. (new) A ventilation device for ventilating boards mounted in a support unit, the ventilation device comprising:

at least one fan unit connected to a power supply unit by connecting wires; and

a control unit for monitoring the at least one fan unit, wherein the control unit controls a control element arranged in a power circuit of the connecting wires, wherein

a temperature monitoring device is assigned to each board for through-connecting a switching device connected in parallel to the control element, if a board temperature is greater than a board limit temperature.

13. (new) The ventilation device according to Claim 12, wherein the switching device has switching elements arranged respectively on a board.

14. (new) The ventilation device according to Claim 13, wherein temperature monitoring devices assigned to the boards and switching elements are combined in each case to form a switching unit.

15. (new) The ventilation device according to Claim 14, wherein the switching units and the control unit are arranged in the support unit separately from one another.

16. (new) The ventilation device according to Claim 12, wherein the boards in the support unit are arranged in a pluggable manner in a backplane , and the parallel switching of the switching elements with the control element is established via a backplane line in common to the switching elements.

17. (new) The ventilation device according to Claim 13, wherein the boards in the support unit are arranged in a pluggable manner in a backplane , and the parallel switching of the switching elements

with the control element is established via a backplane line in common to the switching elements.

18. (new) The ventilation device according to Claim 14, wherein the boards in the support unit are arranged in a pluggable manner in a backplane , and the parallel switching of the switching elements with the control element is established via a backplane line in common to the switching elements.

19. (new) The ventilation device according to Claim 15, wherein the boards in the support unit are arranged in a pluggable manner in a backplane , and the parallel switching of the switching elements with the control element is established via a backplane line in common to the switching elements.

20. (new) The ventilation device according to Claim 13, wherein each switching element is configured as a semiconductor switching element.

21. (new) The ventilation device according to Claim 20, wherein the semiconductor switching element is a power MOSFET.

22. (new) The ventilation device according to Claim 12, wherein the fan unit has a brushless motor with integrated tachogenerator as a drive.

23. (new) The ventilation device according to Claim 13, wherein the fan unit has a brushless motor with integrated tachogenerator as a drive.

24. (new) The ventilation device according to Claim 12, wherein the temperature monitoring device comprises a sensor diode integrated in an integrated circuit of an electronic component of the respective board.

25. (new) The ventilation device according to Claim 24, wherein the sensor diode is for temperature recording.

26. (new) The ventilation device according to Claim 12, wherein four fan units are arranged in a support unit, and are monitored jointly by the control unit configured as an integrated controller module.

27. (new) The ventilation device according to Claim 12, wherein the control unit is connected to a control computer by a bus.

28. (new) The ventilation device according to Claim 27, wherein the bus is configured as a System Management Bus (SMB bus), Intelligent Platform Management Bus (IPMI bus) or I²C bus.

29. (new) A support unit for printed circuit board component groups comprising at least one ventilation device, the ventilation device comprising:

at least one fan unit connected to a power supply unit by connecting wires; and

a control unit for monitoring the at least one fan unit, wherein the control unit controls a control element arranged in a power circuit of the connecting wires, wherein

a temperature monitoring device is assigned to each board for through-connecting a switching device connected in parallel to the control element, if a board temperature is greater than a board limit temperature.